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**CFETP 2A6X1A/C/D/E  
Parts I and II  
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# **AFSC 2A6X1A/C/D/E**

## **AEROSPACE PROPULSION JET ENGINE**



### **CAREER FIELD EDUCATION AND TRAINING PLAN**



**CAREER FIELD EDUCATION AND TRAINING PLAN  
AEROSPACE PROPULSION JET ENGINE SPECIALTY  
AFSC 2A6X1A/C/D/E**

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### Supersedes Listing:

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**AEROSPACE PROPULSION JET ENGINE SPECIALTY  
AFSC 2A6X1A/C/D/E  
CAREER FIELD EDUCATION AND TRAINING PLAN**

## **Part I**

### ***Preface***

**1.** This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document that identifies life-cycle education/training requirements, training support resources, and minimum core task requirements for this specialty. The CFETP will provide personnel a clear career path to success and will instill rigor in all aspects of career field training. **NOTE:** Civilians occupying associated positions will use Part II to support duty position qualification training.

**2.** The CFETP consists of two parts; both parts of the plan are used by supervisors to plan, manage, and control training within the career field.

**2.1.** Part I provides information necessary for overall management of the specialty. Section A explains how everyone will use the plan; Section B identifies career field progression information, duties and responsibilities, training strategies, and career field path; Section C associates each level with specialty qualifications (knowledge, education, training, and other); Section D indicates resource constraints, some examples are funds, manpower, equipment, and facilities. Section E identifies transition training guide requirements for SSgt through MSgt.

**2.2.** Part II includes the following: Section A identifies the Specialty Training Standard (STS) and includes duties, tasks, technical references to support training, Air Education and Training Command (AETC) conducted training, wartime course, core task, and correspondence course requirements; Section B contains the course objective list and training standards supervisors will use to determine if airmen satisfied training requirements; Section C identifies available support materials, an example is a Qualification Training Package (QTP) which may be developed to support proficiency training). These packages are identified in AFIND8, *Numerical Index of Specialized Educational Training Publications*. Section D identifies a training course index supervisors can use to determine resources available to support training, included here are both mandatory and optional courses. Section E identifies MAJCOM unique training requirements supervisors can use to determine additional training required for the associated qualification needs.

**3.** Using guidance provided in the CFETP will ensure individuals in this specialty receive effective and efficient training at the appropriate point in their career. This plan will enable us to train today's work force for tomorrow's jobs. At unit level, supervisors and trainers will use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

## ***ABBREVIATIONS/TERMS EXPLAINED***

**Advanced Training (AT).** Formal course which provides individuals who are qualified in one or more positions of their Air Force Specialty (AFS) with additional skills/knowledge to enhance their expertise in the career field. Training is for selected career airmen at the advanced level of the AFS.

**Air Force Job Qualification Standard (AFJQS).** A comprehensive task list which describes a particular job type or duty position. They are used by supervisors to document task qualifications. The tasks on AFJQS are common to all persons serving in the described duty position.

**Allocation Curves.** The relation of hours of training in different training settings to the degree of proficiency which can be achieved on specified performance requirements.

**Career Field Education and Training Plan (CFETP).** A CFETP is a comprehensive, multipurpose document encapsulating the entire spectrum of education and training for a career field. It outlines a logical growth plan that includes training resources and is designed to make career field training identifiable, to eliminate duplication, and to ensure this training is budget defensible.

**Career Training Guide (CTG).** A document that uses Task Modules (TMs) in lieu of tasks to define performance and training requirements for a career field.

**Continuation Training.** Additional training exceeding requirements with emphasis on present or future duty assignments.

**Core Task.** A task Air Force Career Field Managers (AFCFMs) identify as a minimum qualification requirement within an Air Force specialty or duty position. These tasks exemplify the essence of the career field - the foundation. Core tasks identified with an \*/R are optional for AFRES and ANG.

**Course Objective List (COL).** A publication, derived from initial/advanced skills course training standard, identifying the tasks and knowledge requirements, and respective standards provided to achieve a 3-/7-skill level in this career field. Supervisors use the COL to assist in conducting graduate evaluations in accordance with AFI 36-2201, Developing, Managing and Conducting Military Training Programs.

**Course Training Standard (CTS).** A CTS is developed for all courses not governed by an STS, including specialized training packages and computer-based training courses.

**Enlisted Specialty Training (EST).** A mix of formal training (technical school) and informal training (on-the-job) to qualify and upgrade airmen in each skill level of a specialty.

**Exportable Training.** Additional training via computer assisted, paper text, interactive video, or other necessary means to supplement training.

**Field Technical Training (Type 4).** Special or regular on-site training conducted by a Field Training Detachment (FTD) or by a Mobile Training Team (MTT).

**Instructional System Development (ISD).** A deliberate and orderly, but flexible process for planning, developing, implementing, and managing instructional systems. It ensures personnel are taught in a cost efficient way the knowledge, skills, and attitudes essential for successful job performance.

**Initial Skills Training.** A formal resident course which results in award of the entry level.

**Occupational Survey Report (OSR).** A detailed report showing the results of an occupational survey of tasks performed within a particular AFS.

**On-the-Job Training (OJT).** Hands-on, over-the-shoulder training conducted to certify personnel in both upgrade (skill level award) and job qualification (duty position certification) training.

**Optimal Training.** The ideal combination of training settings resulting in the highest levels of proficiency on specified performance requirements within the minimum time possible.

**Qualification Training (QT).** Actual hands-on task performance training designed to qualify an individual in a specific duty position. This portion of the dual channel on-the-job training program occurs both during and after the upgrade training process. It is designed to provide the performance skills required to do the job.

**Qualification Training Package (QTP).** An instructional package designed for use at the unit to qualify, or aid qualification, in a duty position or program, or on a piece of equipment. It may be printed, computer-based, or in other audiovisual media.

**Representative Sites.** Typical organizational units having similar missions, weapon systems or equipment, or a set of jobs, used as a basis for estimating average training capacities and costs within the Training Impact Decision System (TIDES).

**Resource Constraints.** Resource deficiencies, such as money, facilities, time, manpower, and equipment that preclude desired training from being delivered.

**Skills Training.** A formal course which results in the award of a skill level.

**Specialty Training.** A mix of formal training (technical school) and informal training (on-the-job) to qualify and upgrade airmen in the award of a skill level.



**Specialty Training Package and COMSEC Qualification Training Package.** A composite of lesson plans, test material, instructions, policy, doctrine, and procedures necessary to conduct training. These packages are prepared by AETC, approved by National Security Agency (NSA), and administered by qualified Communications Security (COMSEC) maintenance personnel.

**Specialty Training Standard (STS).** An Air Force publication that describes skills and knowledge that airman in a particular Air Force specialty needs on the job. It further serves as a contract between the Air Education and Training Command and the user to show the overall training requirements for an Air Force specialty code that the formal schools teach.

**Standard.** An exact value, a physical entity, or an abstract concept, established and defined by authority, custom, or common consent to serve as a reference, model, or rule in measuring quantities or qualities, establishing practices or procedures, or evaluating results. A fixed quantity or quality.

**Task Module (TM).** A group of tasks performed within an Air Force specialty that are performed together and that require common knowledge, skills, and abilities. TMs are identified by an identification code and a statement.

**Total Force.** All collective Air Force components (active, reserve, guard, and civilian elements) of the United States Air Force.

**Training Capacity.** The capability of a training setting to provide training on specified requirements, based on the availability of resources.

**Training Impact Decision System (TIDES).** A computer-based decision support technology being designed to assist Air Force career field managers in making critical judgments relevant to what training should be provided personnel within career fields, when training should be provided (at what career points), and where training should be conducted (training setting).

**Training Planning Team (TPT).** Comprised of the same personnel as a U&TW, however TPTs are more intimately involved in training development and the range of issues are greater than is normal in the U&TW forum.

**Training Requirements Analysis.** A detailed analysis of tasks for a particular AFS to be included in the training decision process.

**Training Setting.** The type of forum in which training is provided (formal resident school, on-the-job, field training, mobile training team, self-study etc.).

**Upgrade Training (UGT).** Mandatory training which leads to attainment of higher level of proficiency.

**Utilization and Training Pattern.** A depiction of the training provided to and the jobs performed by personnel throughout their tenure within a career field or Air Force specialty.

There are two types of patterns: 1) Current pattern, which is based on the training provided to incumbents and the jobs to which they have been and are assigned; and 2) Alternate pattern, which considers proposed changes in manpower, personnel, and training policies.

**Utilization and Training Workshop (U&TW).** A forum of MAJCOM Air Force Specialty Code (AFSC) functional managers, Subject Matter Experts (SMEs), and AETC training personnel that determines career ladder training requirements.

### ***Section A - General Information***

**1. Purpose of the CFETP.** This Career Field Education and Training Program (CFETP) provides information necessary for the Air Force Career Field Manager (AFCFM), MAJCOM Functional Managers (MFMs), Commanders, Training Managers (TMs), supervisors, and trainers to plan, develop, manage, and conduct an effective career field training program. This plan outlines the training that individuals in this Air Force Specialty (AFS) should receive to develop and progress throughout their career. This plan identifies initial skills, upgrade, qualification, advanced, and proficiency training. Initial skills training is the AFS specific training an individual receives upon entry into the Air Force or upon retraining into this specialty for award of the 3-skill level. Normally, this training is conducted by AETC at one of the technical training centers. Upgrade training identifies the mandatory courses, task qualification requirements, and correspondence course completion requirements for award of the 3-, 5-, 7-, and 9-skill levels. Qualification training is actual hands-on task performance training designed to qualify an airman in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skills/knowledge required to do the job. Advanced training is formal specialty training used for selected airmen.

Proficiency training is additional training, either in-residence or exportable advanced training courses, or on-the-job training, provided to personnel to increase their skills and knowledge beyond the minimum required for upgrade. The CFETP has several purposes, some are:

**1.1.** Serves as a management tool to plan, manage, conduct, and evaluate a career field training program. Also, it is used to help supervisors identify training at the appropriate point in an individual's career.

**1.2.** Identifies task and knowledge training requirements for each skill level in the specialty and recommends education/training throughout each phase of an individual's career.

**1.3.** Lists training courses available in the specialty, identifies sources of training, and the training delivery method.

**1.4.** Identifies major resource constraints which impact full implementation of the desired career field training process.

**2. Uses of the CFETP.** The plan will be used by MFMs and supervisors at all levels to ensure comprehensive and cohesive training programs are available for each individual in the specialty.

**2.1.** AETC training personnel will develop/revise formal resident, non-resident, field and exportable training based on requirements established by the users and documented in Part II of the CFETP. They will also work with the AFCFM to develop acquisition strategies for obtaining resources needed to provide the identified training.

**2.2.** MFMs will ensure their training programs complement the CFETP mandatory initial, upgrade, and proficiency requirements. Identified requirements can be satisfied by OJT, resident training, contract training, or exportable courses. MAJCOM-developed training to support this AFSC must be identified for inclusion into this plan.

**2.3.** Each individual will complete the mandatory training requirements specified in this plan. The lists of courses in Part II will be used as a reference to support training.

**3. Coordination and Approval of the CFETP.** The AFCFM is the approval authority. MAJCOM representatives and AETC training personnel will identify and coordinate on the career field training requirements. The AETC training manager for this specialty will initiate an annual review of this document by AETC and MFMs to ensure currency and accuracy. Using the list of courses in Part II, they will eliminate duplicate training. Applicable inputs will be routed to 361 TRS/RJ, 501 Missile Road, Sheppard AFB, TX 76311-2264.

### ***Section B - Career Progression and Information***

**4. Specialty Description.** Inspects, maintains, modifies, tests, services, and repairs propellers, turboprop/turboshaft engines, jet engines, small gas turbine engines, and engine ground support equipment (SE). Manages aerospace propulsion functions and activities. Related DoD occupational Subgroup: 601.

#### **4.1. Duties and Responsibilities:**

**4.1.1.** Plans, organizes, and directs aerospace propulsion maintenance activities. Interprets and implements directives and publications pertaining to maintenance functions, including environmentally safe maintenance practices. Determines resource requirements, including facilities, equipment, and supplies. Inspects and evaluates maintenance activities. Encourages quality air force activities.

**4.1.2.** Advises, performs troubleshooting, and determines repair procedures on aircraft engines and propellers. Diagnoses and repairs malfunctions using technical publications. Solves maintenance problems by studying drawings, wiring and schematic diagrams, technical instructions, and analyzing operating characteristics of aircraft engines and propellers. Inspects, certifies, and approves completed maintenance actions.

**4.1.3.** Removes, installs, inspects, repairs, and modifies engines, engine modules, engine components, propellers, and propeller components. Disassembles and assembles engines and propellers adhering to prescribed procedures. Prepares engines and propellers for installation, storage, or transportation. Tests components using bench mockups and test equipment. Installs and removes engines on test stands, and operates, evaluates, and performs test stand functions on engines. Accomplishes operator maintenance on test stands. Inspects and maintains engine ground SE. Operates and performs operator inspections on related SE. Selects, uses, and cares for special tools, and hand tools, and test equipment. Uses and disposes of hazardous waste materials adhering to prescribed procedures.

**4.1.4.** Analyze, interpret, and recommend maintenance actions based on unscheduled engine removals and engine monitoring system data. Coordinate with the base engine manager to analyze scheduled engine removals; recommend forecast actions to the weekly or monthly maintenance schedules.

**5. Skill/Career Progression.** Adequate training and timely progression from the apprentice to the superintendent skill level play an important role in the Air Force's ability to accomplish its mission. It is essential that everyone involved in training do their part to plan, manage, and conduct an effective training program. The guidance provided in this part of the CFETP will ensure each individual receives viable training at appropriate points in their career.

**5.1. Apprentice (3-level).** Upon completion of initial skills training, a trainee will work with a trainer to enhance their knowledge and skills. They will utilize the Career Development Course (CDC) and Task Qualification Training and other exportable courses to progress in the career field. Once task certified, a trainee may perform the task unsupervised.

**5.2. Journeyman (5-level).** Once upgraded to the 5-level, journeymen will enter into continuation training to broaden their experience base. Five-levels may be assigned job positions such as test cell, inspection dock, dispatch, and various staff positions. It is recommended five-levels attend all available FTD courses, and MAJCOM specific training. Individuals will attend the Airman Leadership School (ALS) after having 48 months in the Air Force. After ALS, 5-levels will be considered for appointment as unit trainers. Individuals will use their CDCs to prepare for testing under the Weighted Airmen Promotion System (WAPS). They should also continue their education toward a Community College of the Air Force (CCAF) degree.

**5.3. Craftsman (7-level).** A craftsman can expect to fill various supervisory and management positions such as shift leader, element chief, production supervisor, and task certifier. They will also be assigned to work in staff positions. Seven-levels should take courses or obtain added knowledge on management of resources and personnel, complete the 7-level CDCs, and attend the 7-level resident course. Continued academic education through CCAF and higher degree programs is highly encouraged. In addition, when promoted to TSgt, individuals will attend the Noncommissioned Officer Academy (NCOA).

**5.4. Superintendent (9-level).** A superintendent can be expected to fill positions such as flight chief, production supervisor, and various staff NCOIC jobs. Additional training in the areas of budget, manpower, resources, and personnel management should be pursued through continuing education. Individuals promoted to SMSgt will attend the Senior Noncommissioned Officer Academy (SNCOA). Additional higher education and completion of courses outside their career AFSC are also highly recommended.

**6. Training Decisions.** The CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the aerospace propulsion jet engine career field. The spectrum includes a strategy for when, where, and how to meet the training requirements. The strategy must be apparent and affordable to reduce duplication of training and eliminate a disjointed approach to training. The following training decisions were made at the Utilization and Training Workshop held at Sheppard AFB 9-13 September 96.

**6.1. Initial Skills Training.** Initial/Entry level training is developed and taught by AETC. Minor changes to the 3-level courses for AFSC 2A6X1A included adding: knowledge of TCTOs, operation of personnel stands, use of flex borescope, knowledge of small gas turbines and auxiliary power units, and knowledge of bearing handling. The proficiency level was decreased from 2b to 1b for: CAMS, SBSS, JDD, and 781 series forms to provide for more hands on training time on the engines.

**6.2. Five Level Upgrade Requirements.** The 5-level CDCs were revised to include needed material with emphasis in the following areas: Aircraft safe for maintenance, TCTOs, supply

documents management, equipment account management , depot level repairable/reparable support division, engine historical records, engine status reports, vacuum/pneumatic tester, operate personnel stands, operate and maintain test stand, and bearing handling. The 5-level core tasks were revised in the following manner: The following 5-level core tasks were deleted: Use multimeter, fuel pump removal and installation, and gearbox removal and installation. The following 5-level core tasks were added: Use technical pubs, job data documentation, AFTO form 350, AFTO form 781 series, select and use handtools, select and use engine hardware, use hardware safety devices, preliminary maintenance procedures on: work area, support equipment, and engine. The following 5-level core tasks were changed: Engine rigging was changed to a 7-level core task, fuel control removal and installation was changed from a “\*” to a “\*/R”.

**6.3. Seven Level Upgrade Requirements.** Major changes occurred in both the 7-level CDC and in-resident courses. The 7-level CDCs were revised to emphasize Supervision and Management topics along with the following knowledge items: FOD program manager, enlisted specialty training requirements, AFTO form 22, maintenance supply concept, logistics maintenance management, resource management, mobility, maintenance accountability for forms documentation (JDD/781s), vacuum pneumatic tester, use rigid and flex borescope, damage analysis, and vibration analysis. The 7-level in-resident course was revised to concentrate on supervision and management issues directly relating to the propulsion career field. The following topics will be covered in the 7-level in resident course: Hazardous materials program, enlisted specialty training program, logistics maintenance management, resource management, maintenance accountability for forms documentation, use multimeter, vibration analysis, advanced engine operating principles, electrical and mechanical engine controls, and engine monitoring. Multi-system troubleshooting was deleted from the in-resident course. The following 7-level core tasks were deleted: Prepare teaching outline, provide trainee theory, give feedback on training, develop methods of evaluation, use appropriate methods of evaluation, give supervisor and trainer feedback on results of training, use rigid borescope, and compressor (Fan) repair. The following 7-level core tasks were added: engine rigging and augmentor inspection.

**6.4. Proficiency Training.** Any additional knowledge and skill requirements which were not taught through initial skills or upgrade training were assigned to continuation training. The purpose of the continuation training program is to provide additional training exceeding minimum upgrade training requirements with emphasis on present and future duty positions. MAJCOMs must develop a continuation training program that ensures individuals in the Aerospace Propulsion Jet Engine career field receive the necessary training at the appropriate point in their career. The training program will identify both mandatory and optional training requirements.

**7. Community College of the Air Force (CCAF).** Upon completion of basic military training and assignment to an Air Force career field, active duty, ANG, and AFRES enlisted members are registered in the degree program designed for their career field. CCAF provides the opportunity to obtain an Associates in Applied Sciences Degree (AAS). In addition to its associates degree program, CCAF offers the following:

**7.1. Occupational Instructor Certification.** Upon completion of instructor qualification training, consisting of the Basic Instructor Course (BIC) and supervised practice teaching, CCAF instructors who possess an associates degree or higher may be nominated by their school commander/commandant for certification as an occupational instructor.

**7.2. Trade Skill Certification.** When a CCAF student separates or retires, a trade skill certification is awarded for the primary occupational specialty. The College uses a competency based assessment process for trade skill certification at one of four proficiency levels: Apprentice, Journeyman, Craftsman/Supervisor, or Master Craftsman/Manager. All are transcribed on the CCAF transcript.

**7.3. Degree Requirements.** All airmen are automatically entered into the CCAF program. Prior to completing an associates degree, the 5-level must be awarded and the following requirements must be met:

	Semester Hours
Technical Education.....	24
Leadership, Management, and Military Studies.....	6
Physical Education.....	4
General Education.....	15
Program Elective.....	15
Technical Education; Leadership, Management, and Military Studies; or General Education	
Total.....	64

**7.3.1. Technical Education** (24 Semester Hours): A minimum of 12 semester hours of Technical Core subjects/courses must be applied and the remaining semester hours applied from Technical Core/Technical Elective courses.

**7.3.2. Leadership, Management, and Military Studies** (6 Semester Hours): Professional military education and/or civilian management courses.

**7.3.3. Physical Education** (4 Semester Hours): This requirement is satisfied by completion of Basic Military Training.

**7.3.4. General Education** (15 Semester Hours): Applicable courses must meet the criteria for application of courses to the General Education Requirements (GER) and be in agreement with the definitions of applicable General Education subjects/courses as provided in the CCAF General Catalog.

**7.3.5. Program Elective** (15 Semester Hours): Satisfied with applicable Technical Education; Leadership, Management, and Military Studies; or General Education subjects/courses, including natural science courses meeting GER application criteria and foreign language credit earned at the Defense Language Proficiency Test. Six semester hours of CCAF degree-applicable technical credit otherwise not applicable to this program may be applied.

**7.4.** Additional off-duty education is a personal choice that is highly encouraged for all. Individuals desiring to become an Air Education and Training Command Instructor should be actively pursuing an associates degree. A degreed faculty is necessary to maintain accreditation through the Southern Association of Colleges and Schools.

## 8. Career Field Path.

### 8.1. Manpower Table.

<b>Table A8.1. Manpower Table.</b>							
	CMSgt	SMSgt	MSgt	TSgt	SSgt	SrA	A1C
Base Level	142	71	313	647	1266	1568	858
MAJCOM Staff	20	12	10	0	0	0	0
HQ USAF Staff	1	0	0	0	0	0	0
FOA/DRU	1	0	0	0	0	0	0
Other	3	2	3	4	2	0	0
Total	167	85	326	651	1268	1568	858

## 8.2. Enlisted Career Path.

<b>Table A8.2. Enlisted Career Path</b>				
<b>Education and Training Requirements</b>	<b>GRADE REQUIREMENTS</b>			
	<b>Rank</b>	<b>Average Sew-On</b>	<b>Earliest Sew-On</b>	<b>High Year Of Tenure (HYT)</b>
<b>Basic Military Training school</b>				
<b>Apprentice Technical School</b> (3-Skill Level)	Amn A1C	6 months 16 months		
<b>Upgrade To Journeyman (5-Skill Level)</b> - Complete 3 months duty position/apprentice experience <b>before</b> beginning journeyman training. - Minimum 12 months on-the-job training. - Complete appropriate CDC if/when available. - Sew-on SrA for award of the 5-skill level.	SrA	3 years	28 months	10 Years
<b>Airman Leadership School (ALS)</b> - Must be a SrA with 48 months time in service or be a SSgt Selectee. - Resident graduation is a prerequisite for SSgt sew-on (Active Duty Only).	<b><u>Trainer</u></b> - ALS graduate. - Possess the same AFSC at a higher skill level than the trainee, and be certified to train others. - Must attend formal OJT Trainer Training and appointed by Commander.			
<b>Upgrade To Craftsman (7-Skill Level)</b> - Minimum rank of SSgt. - 18 months OJT. - Complete appropriate CDC if/when available. - Advanced Technical School.	SSgt	7.5 years	3 years	20 Years
	<b><u>Certifier</u></b> - Possess at least a 7-skill level in the same AFSC, if possible but not required. - Attend formal OJT Certifier Course and appointed by Commander. - Be a person other than the trainer.			
<b>Noncommissioned Officer Academy (NCOA)</b> - Must be a TSgt or TSgt Selectee. - Resident graduation is a prerequisite for MSgt sew-on (Active Duty Only).	TSgt	12.5 years	5 years	20 Years
	MSgt	16 years	8 years	24 Years
<b>USAF Senior NCO Academy (SNCOA)</b> - Must be a SMSgt or SMSgt Selectee. - Resident graduation is a prerequisite for CMSgt sew-on (Active Duty Only).	SMSgt	19.2 years	11 years	26 Years
<b>Upgrade To Superintendent (9-Level)</b> - Minimum rank of SMSgt. - Must be a resident graduate of SNCOA (Active Duty Only).	CMSgt	21.5 years	14 years	30 Years



## ***Section C, Skill Level Training Requirements***

**9. Purpose.** Skill level training requirements in this career field are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in broad, general terms and establishes the mandatory requirements for entry, award, and retention of each skill level. The specific task and knowledge training requirements are identified in the STS in Part II, Sections A and B of this CFETP.

**10. Specialty Qualification Requirements:** The various skill levels in this career field are defined in terms of tasks and knowledge proficiency requirements for each skill level. They are stated in broad general terms and establish the standards of performance. The specific task and knowledge training requirements are identified in the STS in Part II, Section A of the CFETP. Unit work centers must develop a structured training program to ensure the following requirements are met.

### **10.1. Apprentice Level Training:**

**10.1.1. Specialty Qualification.** Knowledge is mandatory of mechanical, hydromechanical, electrical, and hydraulic principles applying to jet and turboprop engines, and propellers, oil analysis principles; wear metal criteria and guidelines; concepts and application of maintenance directives; using and interpreting diagrams and technical publications; and proper handling, use, and disposal of hazardous waste materials.

**10.1.1.1. Knowledge.** To perform the duties at the 3-skill level, an individual must be able to understand basic system theory of operation and be able to perform certain organizational maintenance level tasks under close supervision until they are task certified. A 3-level must be able to use technical data, common hand tools, and special test equipment. Apprentices must be qualified to remove and install system components, perform engine/propeller change, use SE, trace system schematic flow on system schematic diagrams, and document maintenance actions in the automated data system.

**10.1.1.2. Education.** For entry into this specialty, completion of high school with courses in general science, mechanics, or mathematics is desirable.

**10.1.1.3. Training.** For award of AFSC 2A631C/D/E, completion of the Aerospace Propulsion Apprentice Jet Engine course is mandatory.

**10.1.1.4. Experience.** This specialty has no mandatory/prerequisite military or civilian work experience for entry.

**10.1.1.5. Other.** For entry into this specialty normal color vision is required as defined in AFMAN 48-123 is mandatory.

**10.1.2. Training Sources and Resources.** The initial skills course will provide the required knowledge and qualifications. Initial skills training encompasses jet engine theory and operating principles, system operation, component removal and operation, introduction to general flight line maintenance practices, use of technical publications, maintenance documentation, and support equipment familiarization and use.

**10.1.3. Implementation.** Upon graduation from Basic Military Training, airmen are assigned to the training center for completion of one of the following Aerospace Propulsion Apprentice, Jet Engine Courses: J3ABR2A631C 001, J3ABR2A631D 007, or J3ABR2A631E 006. Completion of any one of these courses will award the 3-skill level.

## **10.2. Journeyman Level Training:**

**10.2.1 Specialty Qualification.** Qualification in and possession of AFSC 2A631C/D/E. Also, experience in functions such as installing, maintaining, or repairing aerospace aircraft engines or propellers. A journeyman must be task qualified on inspecting jet engine components, systems, correcting system malfunctions, repairing and replacing system components, operational checks, and use and maintenance of test and support equipment.

**10.2.1.1. Knowledge.** In addition to the 3-level qualifications, an individual must possess the knowledge and skill necessary to maintain jet engines. A 5-level must be task qualified on inspecting jet engine components, systems, correcting system malfunctions, repairing and replacing system components, operational checks, and the use and maintenance of test and support equipment.

**10.2.1.2. Education.** Requirements are as defined for the apprentice level. For entry into this specialty, completion of high school with courses in general science, mechanics, or mathematics is desirable.

**10.2.1.3. Training.** Requirements for the Journeyman Level require completion of the 5-level CDC and completion of the core tasks specified in the STS.

**10.2.1.4. Experience.** The minimum experience must include being task certified on all 5-level core tasks, completion of the 5-level CDC, minimum 12 months OJT, and any duty position requirements identified by the supervisor.

**10.2.1.5. Other.** For entry into this specialty normal color vision is required as defined in AFMAN 48-123 is mandatory.

**10.2.2. Training Sources and Resources.** The 5-level CDC provides the career knowledge and training required. Qualification training and OJT will provide training and qualification on the core tasks identified in the STS. The CDC is written to build from the trainee's current knowledge base, and provide more in-depth knowledge to support OJT requirements.

**10.2.3. Implementation.** Training to the 5-level is performed by the units, utilizing the STS, AFJQS, and CDCs. Upgrade to the 5-level requires completion of the 2A651A CDC, completion of all core tasks, minimum of 12 months OJT, and promotion to E-4.

## **10.3. Craftsman Level Training:**

**10.3.1 Specialty Qualification.** Qualification in and possession of AFSC 2A651A. Also, experience performing or supervising functions involving installation, repair, testing or modification of engines or propellers.

**10.3.1.1. Knowledge.** In addition to the 5-level qualifications, an individual must possess advanced skills and knowledge of theory, concepts, principles and application of engine maintenance. The 7-level must be able to supervise and train personnel to maintain jet engines. The 7-level must be able to plan, schedule, and organize maintenance to ensure effective utilization of available resources. Qualification is required on advanced repair, inspection, troubleshooting, and diagnostic techniques. Historical documentation analysis is also required for all 7-levels.

**10.3.1.2. Education.** There are no additional educational requirements beyond those defined for the apprentice level. For entry into this specialty, completion of high school with courses in general science, mechanics, or mathematics is desirable.

**10.3.1.3. Training.** The 7-level CDC provides the career training required. The CDC is written to build from the trainee's current knowledge base and provide more in-depth knowledge to

support OJT requirements. Qualification training and OJT will provide training and qualification on the core tasks identified in the STS or AFJQS. Seven-level upgrade training will be conducted by certified trainers using AF core tasks, unit/MAJCOM specific courses, 7-level CDCs and the formal 7-level in-resident course. The 7-level course is written to provide supervision and management and advanced systems knowledge.

**10.3.1.4. Experience.** Qualification in and possession of AFSC 2A651A. Also, experience performing or supervising functions involving installation, repair, testing or modification of engines or propellers. The minimum experience must include being task certified on all 7-level core tasks, completion of the 7-level CDC, 18 months OJT, and any duty position requirements identified by the supervisor.

**10.3.1.5. Other.** For entry into this specialty normal color vision is required as defined in AFMAN 48-123 is mandatory.

**10.3.2. Training Sources and Resources.** The 7-level CDC provides the career knowledge and training required. Qualification training and OJT will provide training and qualification on the core tasks identified in the STS. The CDC is written to build from the trainee's current knowledge base, and provide more in-depth knowledge to support OJT requirements. The purpose of the 7-level in-resident course is to build on the knowledge gained from the CDCs and OJT. The in-resident course is designed to tie together the tasks and knowledge required to be a successful craftsman.

**10.3.3. Implementation.** Training to the 7-level is performed by the units utilizing the STS, AFJQS, and CDCs. Upgrade to the 7-level requires completion of the 2A671A CDC, completion of all core tasks, 18 months OJT, completion of the advanced (Craftsman) in-resident technical school and promotion to E-5.

#### **10.4. Superintendent Level Training:**

**10.4.1 Specialty Qualification.** Qualification in and possession of AFSC 2A671A or 2A671B. Also, experience managing or directing repair activities for aerospace aircraft engines, propellers, and associated maintenance functions.

**10.4.1.1. Knowledge.** In addition to the 7-level qualifications, an individual must possess advanced skills and knowledge of concepts and principles in the management of aircraft propulsion systems. The 9-level must be an effective leader and must be able to manage funding and other assigned resources. They must also be knowledgeable of all environmental standards and ensure adherence to the proper handling and disposal of hazardous materials and waste.

**10.4.1.2. Education.** There are no additional educational requirements beyond those defined for the apprentice level. For entry into this specialty, completion of high school with courses in general science, mechanics, or mathematics is desirable.

**10.4.1.3. Training.** For award of AFSC 2A691, completion of applicable PME courses and promotion to SMSgt is mandatory.

**10.4.1.4. Experience.** Qualification in and possession of AFSC 2A671A or 2A671B. Also, experience managing or directing repair activities for aerospace aircraft engines, propellers, and associated maintenance functions.

**10.4.1.5. Other.** For entry into this specialty normal color vision is required as defined in AFMAN 48-123 is mandatory.

**10.4.2. Training Sources/Resources.** The Senior NCO Academy and unit OJT will be used for training.

**10.4.3. Implementation.** The 9-level will be awarded after completing MAJCOM requirements, unit OJT, promotion to SMSgt, and completion of the Senior NCO Academy.

#### ***Section D - Resource Constraints***

**11. Purpose.** This section identifies known resource constraints which preclude optimal/desired training from being developed or conducted, including information such as cost and manpower. Narrative explanations of each resource constraint and an impact statement describing what effect each constraint has on training are included. Also included in this section are actions required, office of primary responsibility, and target completion dates. Resource constraints will be, as a minimum, reviewed and updated annually.

**11.1. Apprentice Level Constraints.** There are no 3-level constraints.

**11.2. Five Level Training Constraints.** There are no 5-level constraints.

**11.3. Seven Level Training Constraints.** There are no 7-level constraints.

#### ***Section E. Transitional Training Guide***

There are currently no transition training requirements. This area reserved.

## Part II

### *Section A - Specialty Training Standard*

**1. Implementation.** This STS is used for technical training provided by AETC for the following courses: Courses J3ABR2A631D 007 (F100) and J3ABR2A631E 006 (F110) will begin with class 970703 with a graduation date of 971003. Course J3ABR2A631C 001 (Conventional) will begin with class 970731 with a graduation date of 971003. The 7-level J3ACR2A671A 003 (Craftsman) course will begin on 970512 and will graduate on 970523.

**2. Purpose.** As prescribed in AFI 36-2201, this STS:

**2.1.** Lists in column 1 (Tasks, Knowledge, and Technical References) the most common tasks, knowledge, and technical references (TR) necessary for airman to perform duties in the 3-, 5-, and 7-skill level.

**2.2.** Identifies in column 2 (Core Tasks), by asterisk (\*), specialty-wide training requirements. Core tasks identified with a \*/R are optional for AFRES and ANG. Certification on all shop/flightline core tasks applicable to at least one MDS aircraft assigned must be completed for skill level upgrade. Core tasks which are not applicable to base assigned aircraft or equipment are not required for upgrade.

**2.3.** Provides certification for OJT in column 3. This column is used to record start and completion dates of tasks and knowledge training requirements and for trainee, trainer, and certifier initials. Use automated training management systems to document technician qualifications, if available. Task certification must show a certification/completion date. Column 4 shows formal training and correspondence course requirements. This column shows the proficiency to be demonstrated on the job by the graduate as a result of training on the task/knowledge and the career knowledge provided by the correspondence course. See CADRE/AFSC/CDC listing maintained by the unit training manager for current CDC listings.

**2.4 Qualitative Requirements.** Attachment 1 contains the proficiency code key used to indicate the level of training and knowledge provided by resident training and career development courses.

**2.5.** Becomes a job qualification standard (JQS) for on-the-job training when placed in AF Form 623, **On-The-Job Training Record**, and used according to AFI 36-2201. When used as a JQS, the following requirements apply:

**2.5.1. Documentation.** Document and certify completion of training. Identify duty position requirements by circling the subparagraph number next to the task statement. Use of attachments one and two is mandatory; use of attachments three, four, and five is optional depending upon duty position. As a minimum, complete the following columns in Part II of the CFETP: Training Completed, Trainee Initials, Trainer Initials, Certifier Initials (if applicable). An AFJQS may be used in lieu of Part II of the CFETP only upon approval of the AFCFM.

**2.5.1.1. Converting from Old Document to CFETP.** All AFJQSs and previous CFETPs were replaced by this CFETP; therefore, conversion of all training records to this CFETP STS is mandatory. Automated records reflecting this STS may be used and are highly encouraged. Use this CFETP STS (or automated STS) to identify and certify all past and current qualifications. For those tasks previously certified and required in the current duty position, evaluate current qualifications and, when verified, recertify using current date as completion date and enter certifier's initials. The trainee will initial in the trainee's block. For previous certification on tasks

not required in the current duty position, carry forward *only* the previous completion date. If and when these tasks become a duty position requirement, recertify with current date and certifier's initials and trainee's initials.

**2.5.1.2. Documenting Career Knowledge.** When a CDC is not available: the supervisor identifies STS training references that the trainee requires for career knowledge and ensures, as a minimum, that trainees cover the mandatory items in AFI 36-2108. For two-time CDC course exam failures: supervisors identify all STS items corresponding to the areas covered by the CDC. The trainee completes a study of STS references, undergoes evaluation by the task certifier, and receives certification on the STS. **NOTE:** Career Knowledge must be documented prior to submitting a CDC waiver.

**2.5.1.3. Decertification and Recertification.** When an airman is found to be unqualified on a task previously certified for his or her position, the supervisor lines through the previous certification or deletes previous certification when using automated system. Appropriate remarks are entered on the AF Form 623A, **On-The-Job Training Record Continuation Sheet**, as to the reason for decertification. The individual is recertified (if required) either by erasing the old entries and writing in the new or by using correction fluid (if the entries were made in ink) over the previously certified entry.

**2.5.2. Training Standard.** Tasks are trained and qualified to the go/no go level. Go means the individual can perform the task without assistance and meet local demands for accuracy, timeliness, and correct use of procedures.

**2.6.** Is a guide for development of promotion tests used in the Weighted Airman Promotion System (WAPS). Specialty Knowledge Tests (SKTs) are developed at the USAF Occupational Measurement Squadron by senior NCOs with extensive practical experience in their career fields. The tests sample knowledge of STS subject matter areas judged by test development team members as most appropriate for promotion to higher grades. Questions are based upon study references listed in the WAPS catalog. Individual responsibilities are in chapter 14 of AFI 36-2606, *US Air Force Reenlistment, Retention, and NCO Status Programs* (formerly AFR 35-16, volume 1). WAPS is not applicable to the Air National Guard.

**3. Recommendations.** Report unsatisfactory performance of individual course graduates to 361 TRS/RJ, 501 Missile Road, Sheppard AFB TX, 76311-2264. For quick response to problems, call the 24-hour customer service information line, DSN 736-5236. Reference specific STS paragraphs.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

WILLIAM P. HALLIN, Lieutenant General, USAF  
DCS/Installations and Logistics

5 Attachments:

1. Proficiency Code Key

2. Knowledge and Performance  
Requirements for 2A6X1A/C/D/E
3. Additional Knowledge and Performance  
Requirements for 2A6X1D/E only
4. Additional Knowledge and Performance  
Requirements for 2A6X1C only
5. Knowledge and Performance Requirements  
for Air Mobility Command (AMC) only

This Block Is For Identification Purposes Only		
Name Of Trainee		
Printed Name ( <i>Last, First, Middle Initial</i> )	Initials (Written)	SSAN
Printed Name Of Certifying Official And Written Initials		
<i>N/I</i>	<i>N/I</i>	
<i>N/I</i>	<i>N/I</i>	
<i>N/I</i>	<i>N/I</i>	
<i>N/I</i>	<i>N/I</i>	
<i>N/I</i>	<i>N/I</i>	
<i>N/I</i>	<i>N/I</i>	

### QUALITATIVE REQUIREMENTS

Proficiency Code Key		
	Scale Value	Definition: The individual
<b>Task Performance Levels</b>	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (Extremely Limited)
	2	Can do most parts of the task. Needs only help on hardest parts. (Partially Proficient)
	3	Can do all parts of the task. Needs only a spot check of completed work. (Competent)
	4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (Highly Proficient)
<b>*Task Knowledge Levels</b>	a	Can name parts, tools, and simple facts about the task. (Nomenclature)
	b	Can determine step by step procedures for doing the task. (Procedures)
	c	Can identify why and when the task must be done and why each step is needed. (Operating Principles)
	d	Can predict, isolate, and resolve problems about the task. (Advanced Theory)
<b>**Subject Knowledge Levels</b>	A	Can identify basic facts and terms about the subject. (Facts)
	B	Can identify relationship of basic facts and state general principles about the subject. (Principles)
	C	Can analyze facts and principles and draw conclusions about the subject. (Analysis)
	D	Can evaluate conditions and make proper decisions about the subject. (Evaluation)
<p>Explanations:</p> <p>* A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Example: b and 1b)</p> <p>** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks.</p> <p>- This mark is used alone instead of a scale value to show that no proficiency training is provided in the course or CDC.</p> <p>X This mark is used alone in course columns to show that training is required but not given due to limitations in resources.</p> <p>*/R This mark is used to identify a core task that is optional for AFRES and ANG.</p>		



1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL

## ATTACHMENT 2

NOTE 1: The tasks and knowledge listed in attachment 2 will be performed by all personnel in the Aerospace Propulsion Specialty.

NOTE 2: In addition to attachment 2, the tasks and knowledge listed in attachment 3 will only be performed by personnel in the apprentice (3-level) J3ABR2A631D 007 (F100) and J3ABR2A631E 006 (F110) courses. The tasks and proficiency codes in attachment 3 are due to equipment design and because both the F100 and F110 3-level courses are MRT courses.

NOTE 3: In addition to attachment 2, the tasks and knowledge listed in attachment 4 will only be performed by personnel in the apprentice (3-level) J3ABR2A631C 001 (conventional) course. The tasks and proficiency codes in attachment 4 are due to equipment design and because the conventional 3-level course is not a Mission Ready Technician (MRT) course.

NOTE 4: Use paragraph references A2.11.3., A2.11.3.1., A2.11.3.2., A2.11.4., A2.11.4.1., and A2.11.4.2. for the specific system used at each base.

NOTE 5: Due to equipment design, tasks A2.17.5.7. and A2.17.6.4. won't be taught in the 3-level F100 and F110 apprentice courses and task A2.17.6.3. won't be taught in the Conventional course.

NOTE 6: Tasks and knowledge identified by an asterisk (\*) in column 1 are trained in the resident wartime courses.

NOTE 7: Shadowing has been used on task titles in the STS to aid in the identification of tasks requiring knowledge training or task certification training.

A2.1. CAREER FIELD PROGRESSION TR: AFI 36-2101								-	A	-	-		
A2.2. QUALITY AIR FORCE AWARENESS TR: Air Force Handbook 90-502								A	-	-	-		
A2.3. AF OCCUPATIONAL SAFETY AND HEALTH (AFOSH) PROGRAM TR: AFR 127-2, AFIs 21-101, 91-202, 91-301, 91-302, AFOSHSSTD 91-301, and applicable aircraft/engine TOs													
A2.3.1. AFOSH standards for AFSC 2A6X1A								A	B	-	-		
*A2.3.2. Hazards of AFSC 2A6X1A								A	B	-	-		
A2.3.3. Aircraft safe for maintenance								-	B	-	-		
*A2.3.4. Keep work area safe								2b	B	-	-		
A2.3.5. Select/use restraint harness (e.g. Fall protection/prevention equipment)								-	-	-	-		

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
<b>A2.4. FOREIGN OBJECT DAMAGE (FOD) PROGRAM</b> TR: AFI 21-101 and applicable MAJCOM Instructions													
*A2.4.1. FOD prevention program								B	B	B	-		
A2.4.2. FOD Program Manager								-	-	B	-		
A2.4.3. Dropped object prevention program (DOPP)								-	-	-	-		
<b>A2.5. HAZARDOUS MATERIALS AND WASTE HANDLING ACCORDING TO ENVIRONMENTAL STANDARDS</b> TR: AFOSH STD 161-21.1W													
A2.5.1. Initial Federal Hazard Communication Training Program								A	-	-	-		
*A2.5.2. Hazardous Materials Program								-	-	-	B		
*A2.5.3. Types of hazardous materials/fluids								A	B	-	-		
*A2.5.4. Handling procedures								A	B	-	-		
*A2.5.5. Storage and labeling								A	B	-	-		
*A2.5.6. Proper disposal								A	B	-	-		
<b>A2.6. ENLISTED SPECIALTY TRAINING</b> TR: AFIs 36-2201 and 36-2232													
*A2.6.1. Training requirements								-	-	B	B		
<b>A2.6.2. OJT trainer requirements</b>													
A2.6.2.1. Prepare teaching outlines or task breakdowns								-	-	-	-		
A2.6.2.2. Provide trainee theory and train on actual equipment								-	-	-	-		
A2.6.2.3. Give feedback on training provided								-	-	-	-		

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A2.6.3. OJT task certifier requirements													
A2.6.3.1. Develop methods of evaluation to determine trainee knowledge/qualification, and training effectiveness								-	-	-	-		
A2.6.3.2. Use appropriate method of evaluation and effectively determine trainee's ability								-	-	-	-		
A2.6.3.3. Give supervisor and trainer feedback on results of training provided, and trainee's strengths/weaknesses								-	-	-	-		
A2.7. TECHNICAL PUBLICATIONS TR: AFD 21-3, TOs 00-5-1, 00-5-2, and 00-5-15													
*A2.7.1. TO system								B	B	-	-		
*A2.7.2. Use technical pubs	*							2b	B	-	-		
A2.7.3. TCTOs								A	B	-	-		
A2.7.4. AFTO Form 22								A	B	B	-		
A2.8. SUPPLY MANAGEMENT TR: AFMAN 23-110 and TOs 00-20-3 and 00-20K-1													
*A2.8.1. Maintenance supply concept								A	B	B	-		
A2.8.2. Supply documents management								-	A	B	-		
A2.8.3. Status tags								A	B	-	-		
A2.8.4. AF Form 2005								A	B	-	-		
A2.8.5. Equipment account management								-	A	B	-		
A2.8.6. Depot Level Reparable (DLR)/ Reparable Support Division (RSD)								-	A	B	-		
A2.8.7. Priority system								-	B	B	-		
A2.8.8. Repair cycle assets								-	B	B	-		

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A2.8.9. Inspect and control USAF shelf-life items								-	-	-	-		
A2.9. MAINTENANCE MANAGEMENT TR: AFI 21-101, TOs 00-35D-54, 00-20 series, and applicable MAJCOM directives													
A2.9.1. Responsibilities of the Operations/ Logistics Group Commander								-	A	B	-		
A2.9.2. Functions within the Maintenance complex								-	A	B	-		
A2.9.3. Engine maintenance management information systems								-	-	B	-		
*A2.9.4. Logistics maintenance management								-	-	B	B		
*A2.9.5. Resource management								-	-	B	B		
A2.9.6. Mobility								-	-	A	-		
*A2.9.7. Maintenance accountability								-	-	B	B		
A2.9.8. Process PMEL equipment								-	-	-	-		
A2.10. PROVIDE AND INTERPRET DATA TR: AFM 66-279 and TO 00-20 series													
A2.10.1. Engine historical records								-	B	B	-		
A2.10.2. Engine status reports								-	B	B	-		
A2.11. MAINTENANCE SYSTEMS, INSPECTION SYSTEMS, AND FORMS TR: AFM 66-279, AFI 21-101, TOs, 00-20 series, 00-35D-54, applicable aircraft work unit code manuals and applicable MAJCOM directives													
A2.11.1. Maintenance systems								-	B	-	-		

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A2.11.2. Inspection systems								-	B	-	-		
A2.11.3 CAMS								A	-	B	-		
A2.11.3.1. Use CAMS	*							1b	-	-	-		
A2.11.3.2. Use Standard Base Supply Systems (SBSS)								1b	-	-	-		
A2.11.4. GO81													
A2.11.4.1. Use GO81	*							-	-	-	-		
A2.11.4.2. Use SBSS								-	-	-	-		
A2.11.5. Document maintenance actions													
A2.11.5.1. Job Data Documentation (JDD) screens	*							1b	-	B	-		
A2.11.5.2. AFTO Form 350	*							2b	-	-	-		
A2.11.5.3. AFTO Form 781 series	*							1b	-	B	C		
A2.11.6. Deficiency reporting system								A	B	B	-		
A2.11.7. Engine and support equipment warranty program								-	B	-	-		
A2.12. SPECIAL/MEASURING TOOLS TR: TOs 32-1-101, 32-1-201, and applicable engine TOs													
*A2.12.1. Select								2b	B	-	-		
*A2.12.2. Use								2b	B	-	-		
A2.13. TEST EQUIPMENT TR: Applicable engine TOs													
A2.13.1. Vibration analyzer								-	B	B	-		
A2.13.2. Jet Cal Analyzer								-	B	B	-		
A2.13.3. Vacuum/Pneumatic tester								-	B	B	-		
*A2.13.4. Use multimeter								1b	B	-	3c		

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A2.14. SUPPORT EQUIPMENT TR: TOs 35A4 series, 35D3 series, 35D4 series, and applicable aircraft/engine TOs													
A2.14.1. Hoisting equipment													
*A2.14.1.1. Operate portable								3b	-	-	-		
A2.14.1.2. Operate power overhead								1b	-	-	-		
*A2.14.2. Operate transportation equipment								2b	B	-	-		
A2.14.3. Engine maintenance stands													
*A2.14.3.1. Operate								2b	B	-	-		
*A2.14.3.2. Remove engine								b	-	-	-		
*A2.14.3.3. Install engine								b	-	-	-		
*A2.14.4. Operate personnel stands								1b	B	-	-		
A2.14.5. Powered support equipment													
A2.14.5.1. Perform inspection, connection/disconnection, start-up/shut-down (operation)								-	-	-	-		
A2.14.5.2. Operate electrical power units (gas turbine/diesel)								-	-	-	-		
A2.14.5.3. Operate MA-31 air conditioner								-	-	-	-		
A2.14.5.4. Operate NF-2 floodlight set								-	-	-	-		
A2.15. ENGINE INSPECTION AND PREVENTATIVE MAINTENANCE TR: TOs 00-20 series, 33B4-2-22-1, 33-1-37 series, and applicable aircraft/engine TOs													
A2.15.1. Borescope procedures													
*A2.15.1.1. Use Rigid								1b	B	B	-		
A2.15.1.1.1. Hot section								-	-	-	-		
A2.15.1.1.2. Cold section								-	-	-	-		

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
*A2.15.1.2. Use Flex								1b	B	B	-		
A2.15.1.2.1. Hot section								-	-	-	-		
A2.15.1.2.2. Cold section								-	-	-	-		
*A2.15.2. Damage analysis								-	-	B	C		
*A2.15.3. Vibration analysis								-	-	B	B		
A2.15.4. Oil analysis program (OAP)								A	B	B	-		
A2.16. ENGINE PRESERVATION, SHIPMENT, AND STORAGE TR: TOs 00-20-4, 00-20-5, 00-85-20, 2J-1-18, 2-1-111, 6J3-1-12, and applicable engine TOs													
*A2.16.1. Prepare engine for shipment								b	B	-	-		
*A2.16.2. Receiving an engine								b	B	-	-		
A2.16.3. Engine/module/components in shipping container													
A2.16.3.1. Remove								-	B	-	-		
A2.16.3.2. Install								-	B	-	-		
A2.16.4. Engine/module/components													
A2.16.4.1. Preserve	*							-	B	-	-		
A2.16.4.2. Depreserve	*							-	B	-	-		
A2.16.5. Practice corrosion control procedures								-	-	-	-		
A2.17. JET ENGINE AND RELATED SYSTEMS TR: Applicable aircraft/engine TOs													
*A2.17.1. Operating principles								B	B	-	C		
*A2.17.2. Constructional features								B	B	-	-		
*A2.17.3. Read and interpret system schematics								-	B	B	3c		

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A2.17.4. In-depth knowledge of engine systems and their integration								-	-	B	-		
A2.17.5. Engine systems													
*A2.17.5.1. Electrical								A	B	-	-		
*A2.17.5.2. Oil								A	B	-	-		
*A2.17.5.3. Fuel								A	B	-	-		
*A2.17.5.4. Ignition								A	B	-	-		
*A2.17.5.5. Anti-icing								A	B	-	-		
*A2.17.5.6. Engine start								A	B	-	-		
*A2.17.5.7. Constant speed drive (CSD)								A	B	-	-		
*A2.17.5.8. Integrated drive generator								A	B	-	-		
A2.17.6. Related systems													
A2.17.6.1. Operate flaps/slats system with slats disabled								-	-	-	-		
A2.17.6.2. Operate auxiliary hydraulic system								-	-	-	-		
A2.17.6.3. Operate mission computer								-	-	-	-		
A2.17.6.4. Check/service engine fuel control								-	-	-	-		
A2.17.6.5. Operate constant speed drive (CSD)/integrated drive generator (IDG)								-	-	-	-		
A2.17.6.6. Electronic engine control operational checkout (static check)								-	-	-	-		
A2.17.6.7. Understand engine bleed control system								-	-	-	-		
A2.17.7. Engine controls													
*A2.17.7.1. Electronic/mechanical								A	B	-	C		
*A2.17.7.2. Compressor air flow								A	B	-	-		
*A2.17.7.3. Thrust augmentation								A	B	-	-		



1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
*A2.17.7.4. Thrust reverser								A	B	-	-		
*A2.17.8. Analyze engine monitoring system data								A	B	B	2b		
A2.18. ENGINE RIGGING TR: Applicable aircraft/engine TOs													
*A2.18.1. Rig		*						A	B	B	-		
A2.18.2. Inspect		*						-	-	B	-		
A2.19. ENGINE REMOVAL AND INSTALLATION IN AIRFRAME TR: TOs 1-1A-8, 2J-1-24, and applicable aircraft TOs													
*A2.19.1. Remove engine								2b	B	-	-		
*A2.19.2. Install engine								2b	B	-	-		
*A2.19.3. Service engine								b	B	-	-		
A2.20. AIRCRAFT INSTALLED ENGINE TESTING TR: applicable aircraft/engine TOs													
A2.20.1. Perform operational checks with or without noise suppressors													
A2.20.1.1. Engine operation								-	B	-	-		
A2.20.1.2. Engine trim								-	B	-	-		
*A2.20.1.3. Evaluate engine performance								-	B	B	2b		
A2.20.1.4. Perform system and component troubleshooting								-	-	B	-		
A2.20.2. Operate and maintain noise suppressor/hush house								-	B	-	-		
A2.21. TEST STAND ENGINE TESTING TR: TOs 00-20-1, 2J-T1-10, 00-25-238, and applicable engine TOs													
A2.21.1. Engine testing								-	B	-	-		

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A2.21.2. Perform pre-operational checks in test stand								-	B	-	-		
A2.21.3. Perform operational checks of engine in test stand								-	B	-	-		
*A2.21.4. Evaluate engine performance								-	B	B	2b		
A2.21.5. Adjust engine system components								-	B	-	-		
A2.21.6. Perform post-operational checks in test stand								-	B	-	-		
A2.21.7. Perform system and component diagnostic and fault isolation								-	-	B	-		
A2.21.8. Operate and maintain test stand								-	B	-	-		
A2.21.9. Remove/install engine on test stand								-	-	-	-		
A2.21.10. Perform ground observer/fireguard duties								-	-	-	-		
*A2.22. SMALL GAS TURBINE ENGINE AND AUXILIARY POWER UNIT (APU) OPERATING PRINCIPLES TR: Applicable engine TOs								A	B	B	-		



1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL

## ATTACHMENT 3

NOTE 1: The tasks and knowledge listed in this attachment will only be performed by personnel in the apprentice (3-level) J3ABR2A631D 007 (F100) and J3ABR2A631E 006 (F110) courses. The tasks and proficiency codes listed in column 4A of this attachment are driven by unique equipment design and because the F100 and F110 3-level courses are Mission Ready Technician (MRT) courses.

NOTE 2: Due to unique engine design, tasks A3.3.11.2. and A3.3.11.3. (core compressor inspection and repair), personnel in the apprentice F100 course will not complete these tasks.

NOTE 3: Due to unique engine design, task A3.3.2.12. (augmentor exhaust nozzle R&R), personnel in the apprentice F100 course will only complete tasks A3.3.2.12.1, A3.3.2.12.1.1, and A3.3.2.12.1.2. Whereas personnel in the F110 course will only complete tasks A3.3.2.12.2., A3.3.2.12.2.1., and A3.3.2.12.2.2.

NOTE 4: Tasks and knowledge identified by an asterisk (\*) in column 1 are trained in the resident wartime courses.

A3.1. HANDTOOLS TR: TO 32-1-101													
*A3.1.1. Select	*							3c	B	-	-		
*A3.1.2. Use	*							3c	B	-	-		
A3.2. GENERAL MAINTENANCE TR: TOs 1-1A-8, 1-1A-14, 2-1-111, 44B-1-15, and applicable aircraft/engine TOs													
*A3.2.1. Select engine hardware	*							3c	B	-	-		
*A3.2.2. Use engine hardware	*							3c	B	-	-		
*A3.2.3. Use hardware safety devices	*							3c	B	-	-		
*A3.2.4. Bearing handling								A	B	-	-		
A3.2.5. Perform proper handling of ESD devices								-	-	-	-		
A3.3. ENGINE MAINTENANCE TR: TOs 00-20-1, 00-35D-54, 1-1A-8, 2J-1-13, 2-1-111, and applicable aircraft/engine TOs													
A3.3.1. Perform preliminary maintenance procedures													
*A3.3.1.1. Work area	*							2b	B	-	-		

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
*A3.3.1.2. Support equipment	*							2b	B	-	-		
*A3.3.1.3. Engine	*							2b	B	-	-		
A3.3.2. Perform maintenance functions													
A3.3.2.1. Engine plumbing													
*A3.3.2.1.1. Remove	*							3b	B	-	-		
*A3.3.2.1.2. Inspect		*						1b	B	-	-		
*A3.3.2.1.3. Install	*							3b	B	-	-		
A3.3.2.2. Engine accessories													
A3.3.2.2.1. Remove													
*A3.3.2.2.1.1. Exciter	*							3c	-	-	-		
*A3.3.2.2.1.2. Fuel pump								3c	-	-	-		
*A3.3.2.2.1.3. Anti-ice	*							3c	-	-	-		
*A3.3.2.2.1.4. Ignitor	*							3c	-	-	-		
*A3.3.2.2.1.5. Fuel control	*/R							3c	-	-	-		
*A3.3.2.2.2. Inspect		*						1b	-	-	-		
A3.3.2.2.3. Install													
*A3.3.2.2.3.1. Exciter	*							3c	-	-	-		
*A3.3.2.2.3.2. Fuel pump								3c	-	-	-		
*A3.3.2.2.3.3. Anti-ice	*							3c	-	-	-		
*A3.3.2.2.3.4. Ignitor	*							3c	-	-	-		
*A3.3.2.2.3.5. Fuel control	*/R							3c	-	-	-		
A3.3.2.3. Gearbox													
*A3.3.2.3.1. Remove								3b	-	-	-		
*A3.3.2.3.2. Inspect		*						1b	-	-	-		
*A3.3.2.3.3. Install								3b	-	-	-		

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A3.3.2.4. Compressor (Fan)													
*A3.3.2.4.1. Remove								3b	-	-	-		
*A3.3.2.4.2. Inspect		*						1b	-	-	-		
*A3.3.2.4.3. Install								3b	-	-	-		
*A3.3.2.4.4. Repair								2b	-	-	-		
A3.3.2.5. Augmentor													
*A3.3.2.5.1. Remove								3c	-	-	-		
*A3.3.2.5.2. Inspect		*						1b	-	-	-		
*A3.3.2.5.3. Install								3c	-	-	-		
A3.3.2.6. Turbine section													
*A3.3.2.6.1. Remove								3b	B	-	-		
*A3.3.2.6.2. Inspect								1b	B	B	-		
*A3.3.2.6.3. Install								3b	B	-	-		
A3.3.2.7. Combustion section													
*A3.3.2.7.1. Remove								2b	B	-	-		
*A3.3.2.7.2. Inspect								1b	B	B	-		
*A3.3.2.7.3. Install								2b	B	-	-		
A3.3.2.8. Engine bearings													
*A3.3.2.8.1. Remove								2b	B	-	-		
A3.3.2.8.2. Clean								-	B	-	-		
A3.3.2.8.3. Inspect								-	B	-	-		
*A3.3.2.8.4. Install								2b	B	-	-		
A3.3.2.9. Fuel manifolds													
*A3.3.2.9.1. Remove								2b	B	-	-		
*A3.3.2.9.2. Inspect								1b	B	-	-		
*A3.3.2.9.3. Install								2b	B	-	-		

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A3.3.2.10. Fuel nozzles													
*A3.3.2.10.1. Remove								2b	B	-	-		
*A3.3.2.10.2. Inspect								1b	B	-	-		
*A3.3.2.10.3. Install								2b	B	-	-		
A3.3.2.11. Compressor (Core)													
A3.3.2.11.1. Remove								-	B	-	-		
*A3.3.2.11.2. Inspect								1b	B	B	-		
*A3.3.2.11.3. Repair								1b	B	-	-		
A3.3.2.11.4. Install								-	B	-	-		
A3.3.2.12. Augmentor exhaust nozzle													
A3.3.2.12.1. F100 segment													
*A3.3.2.12.1.1. Remove								3b	-	-	-		
*A3.3.2.12.1.2. Install								3b	-	-	-		
A3.3.2.12.2. F110 flap													
*A3.3.2.12.2.1. Remove								3b	-	-	-		
*A3.3.2.12.2.2. Install								3b	-	-	-		

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
ATTACHMENT 4													
NOTE 1: The tasks and knowledge listed in this attachment will only be performed by personnel in the apprentice (3-level) J3ABR2A631C 001 (conventional) course. The tasks and proficiency codes listed in column 4A of this attachment are driven by unique equipment design and because the conventional 3-level course <u>is not</u> a Mission Ready Technician (MRT) course.													
NOTE 2: Tasks and knowledge identified by an asterisk (*) in column 1 are trained in the resident wartime courses.													
A4.1. HANDTOOLS TR: TO 32-1-101													
*A4.1.1. Select	*							3b	B	-	-		
*A4.1.2. Use	*							3b	B	-	-		
A4.2. GENERAL MAINTENANCE TR: TOs 1-1A-8, 1-1A-14, 2-1-111, 44B-1-15, and applicable aircraft/engine TOs													
*A4.2.1. Select engine hardware	*							2b	B	-	-		
*A4.2.2. Use engine hardware	*							2b	B	-	-		
*A4.2.3. Use hardware safety devices	*							2b	B	-	-		
*A4.2.4. Bearing handling								A	B	-	-		
A4.2.5. Perform proper handling of ESD devices								-	-	-	-		
A4.2.6. Open/Close engine cowling								-	-	-	-		
A4.2.7. Remove/install aircraft maintenance access panels								-	-	-	-		
A4.2.8. Perform aircraft egress								-	-	-	-		
A4.2.9. Inspect/ use ground maintenance stands								-	-	-	-		
A4.2.10. Perform jacking team member duties								-	-	-	-		
A4.2.11. Statically ground aircraft/equipment								-	-	-	-		



1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A4.2.12. Tow or move aircraft (perform wing/tail walker duties in accordance with applicable TO/checklist)								-	-	-	-		
A4.2.13. Perform refuel/defuel team member duties in accordance with applicable TO/checklist (this will include only SPR monitor duties, and/or fireguard duties)								-	-	-	-		
A4.2.14. Use interphone system								-	-	-	-		
A4.2.15. Perform aircraft marshaling procedures								-	-	-	-		
A4.3. ENGINE MAINTENANCE TR: TOs 00-20-1, 00-35D-54, 1-1A-8, 2J-1-13, 2-1-111, and applicable aircraft/engine TOs													
A4.3.1. Perform preliminary maintenance procedures													
*A4.3.1.1. Work area	*							2b	B	-	-		
*A4.3.1.2. Support equipment	*							2b	B	-	-		
*A4.3.1.3. Engine	*							2b	B	-	-		
A4.3.2. Perform maintenance functions													
A4.3.2.1. Engine plumbing													
*A4.3.2.1.1. Remove	*							2b	B	-	-		
*A4.3.2.1.2. Inspect		*						1b	B	-	-		
*A4.3.2.1.3. Install	*							2b	B	-	-		
A4.3.2.2. Engine accessories													
A4.3.2.2.1. Remove													
*A4.3.2.2.1.1. Exciter	*							3b	-	-	-		
*A4.3.2.2.1.2. Fuel pump								3b	-	-	-		
*A4.3.2.2.1.3. Anti-ice	*							3b	-	-	-		
*A4.3.2.2.1.4. Ignitor	*							3b	-	-	-		

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
*A4.3.2.2.1.5. Fuel control	*R							3b	-	-	-		
*A4.3.2.2.2. Inspect		*						1b	-	-	-		
A4.3.2.2.3. Install													
*A4.3.2.2.3.1. Exciter	*							3b	-	-	-		
*A4.3.2.2.3.2. Fuel pump								3b	-	-	-		
*A4.3.2.2.3.3. Anti-ice	*							3b	-	-	-		
*A4.3.2.2.3.4. Ignitor	*							3b	-	-	-		
*A4.3.2.2.3.5. Fuel control	*R							3b	-	-	-		
A4.3.2.3. Gearbox													
*A4.3.2.3.1. Remove								2b	-	-	-		
*A4.3.2.3.2. Inspect		*						1b	-	-	-		
*A4.3.2.3.3. Install								2b	-	-	-		
A4.3.2.4. Compressor (Fan)													
*A4.3.2.4.1. Remove								2b	-	-	-		
*A4.3.2.4.2. Inspect		*						1b	-	-	-		
*A4.3.2.4.3. Install								2b	-	-	-		
*A4.3.2.4.4. Repair								2b	-	-	-		
A4.3.2.5. Thrust Reverser													
*A4.3.2.5.1. Remove Components								2b	-	-	-		
*A4.3.2.5.2. Inspect Components								1b	-	-	-		
*A4.3.2.5.3. Install Components								2b	-	-	-		

Summary of Changes: The STS layout was rearranged with separate attachments for the specific weapons system. Minor changes to the 3-level courses for AFSC 2A6X1A included adding: knowledge of TCTOs, operation of personnel stands, use of flex borescope, knowledge of small gas turbines and auxiliary power units, and knowledge of bearing handling. The proficiency level was decreased from 2b to 1b for: CAMS, SBSS, JDD, and 781 series forms. The 5-level CDCs were revised to include needed material with emphasis in the following areas: Aircraft safe for maintenance, TCTOs, supply documents management, equipment account management, depot level repairable/reparable support division, engine historical records, engine status reports, vacuum/pneumatic tester, operate personnel stands, operate and maintain test stand, and bearing handling. Major changes occurred in both the 7-level CDC and in-resident courses. The 7-level CDCs were revised to emphasize Supervision and Management topics along with the following knowledge items: FOD program manager, enlisted specialty training requirements, AFTO form 22, maintenance supply concept, logistics maintenance

management, resource management, mobility, maintenance accountability for forms documentation (JDD/781s), vacuum pneumatic tester, use rigid and flex borescope, damage analysis, and vibration analysis. The 7-level in-resident course was revised to concentrate on supervision and management issues directly relating to the propulsion career field. The following topics will be covered in the 7-level in resident course: Hazardous materials program, enlisted specialty training program, logistics maintenance management, resource management, maintenance accountability for forms documentation, use multimeter, vibration analysis, advanced engine operating principles, electrical and mechanical engine controls, and engine monitoring. Multi-system troubleshooting was deleted from the in-resident course.

Attachment 5 AMC Aircraft: C-5/C-9/C-17/C-141/KC-10/KC-135/SMA													
1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC	C 7 Skill Level	EXPORTABLE COURSE		
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
ATTACHMENT 5													
NOTE 1: The tasks and knowledge listed in this attachment are performed by personnel in Air Mobility Command (AMC).													
NOTE 2: Tasks are trained to the Go level and specific items will be determined by each individual workcenter.													
NOTE 3: The reference in parenthesis refers to other attachments and tasks which may be applicable.													
NOTE 4: Address comments, recommended changes, and errors concerning this attachment to the unit training manager. Unit training managers will forward recommendations to the MAJCOM maintenance training manager; HQ AMC/LGQRT, 402 SCOTT DR. UNIT 2A2, SCOTT AFB, IL 62225-5308, DSN: 576-4787 or the AETC training manager at DSN: 736-3545.													
A5.1. ENGINE INSPECTION AND PREVENTIVE MAINTENANCE TR: TOs 00-5-15, 00-20 Series, and applicable aircraft/engine TOs (A2.15)													
A5.1.1. Perform inspections													
A5.1.1.1. Inlet and exhaust													
A5.1.1.2. Special inspections (Overspeed, over temperature, etc)													
A5.1.1.3. Fan exit fairing													
A5.1.1.4. Home station check													
A5.1.1.5. Isochronal (major/minor)													
A5.1.2. Clean gas turbine aircraft engines and associated parts TR: 2J-1-13													
A5.1.3. Fuel filter differential pressure checks													
A5.1.4. Operate, input/retrieve/interpret data from turbine/engine monitoring system/MADARS (Operate caution, warning, and malfunction display, etc.)													
A5.1.5. Chip detector inspection													

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A5.2. ENGINE MAINTENANCE TR: TOs 00-20-1, 00-35D-54, 1-1A-8, 2J-1-13, 2-1-111, and applicable aircraft/engine TOs (A4.3.)													
A5.2.1. Perform preliminary maintenance procedures													
A5.2.1.1. Auxiliary Power Unit (APU)													
A5.2.1.2. Quick Start Auxiliary Power System (QSAS)													
A5.2.2. Perform maintenance functions													
A5.2.2.1. Compressor													
A5.2.2.1.1. Remove													
A5.2.2.1.1.1. Fan case/liner segments													
A5.2.2.1.1.2. First stage fan blades													
A5.2.2.1.2. Inspect													
A5.2.2.1.2.1. Fan case/liner segments													
A5.2.2.1.2.2. First stage fan blades													
A5.2.2.1.3. Repair													
A5.2.2.1.3.1. Fan stator assembly													
A5.2.2.1.3.2. First stage rotor blades													
A5.2.2.1.3.3. High pressure compressor front case by replacing borescope plugs													
A5.2.2.1.4. Install													
A5.2.2.1.4.1. Fan case/liner segments													
A5.2.2.1.4.2. First stage fan blades													
A5.2.2.2. Turbine section													
A5.2.2.2.1. Remove/install													

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A5.2.2.2.1.1. Low pressure turbine section													
A5.2.2.2.1.1.1. Rotor													
A5.2.2.2.1.1.2. Turbine frame													
A5.2.2.2.1.1.3. Turbine case													
A5.2.2.2.1.2. High pressure turbine ACC air shutoff valve													
A5.2.2.2.1.2.1. Rotor													
A5.2.2.2.1.2.2. Nozzles													
A5.2.2.2.1.2.3. Shroud													
A5.2.2.2.2. Inspect/repair													
A5.2.2.2.2.1. Low pressure turbine section													
A5.2.2.2.2.1.1. Rotor													
A5.2.2.2.2.1.2. Turbine frame													
A5.2.2.2.2.1.3. Turbine case													
A5.2.2.3. Combustion section													
A5.2.2.3.1. Remove/install													
A5.2.2.3.1.1. Combustion casing/CRF													
A5.2.2.3.1.2. Combustion chamber													
A5.2.2.3.2. Inspect/repair													
A5.2.2.3.2.1. Combustion casing/CRF													
A5.2.2.3.2.2. Combustion chamber													
A5.2.2.4. Engine bearings/seals													
A5.2.2.4.1. Remove/install													
A5.2.2.4.2. Clean/inspect/repair													
A5.2.2.5. Fuel manifolds													

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A5.2.2.5.1. Remove/install													
A5.2.2.5.2. Inspect/repair													
A5.2.2.6. Fuel nozzles													
A5.2.2.6.1. Remove/install													
A5.2.2.6.2. Inspect/repair													
A5.2.2.7. Compressor													
A5.2.2.7.1. Remove/install													
A5.2.2.7.1.1. Engine stators													
A5.2.2.7.1.2. Stator case(s) (e.g. Compressor/intermediate/diffuser)													
A5.2.2.7.1.3. N1 compressor													
A5.2.2.7.1.4. N2 compressor													
A5.2.2.7.2. Inspect/repair													
A5.2.2.7.2.1. Engine stators													
A5.2.2.7.2.2. Stator case(s) (e.g. Compressor/intermediate/diffuser)													
A5.2.2.7.2.3. N1 compressor													
A5.2.2.7.2.4. N2 compressor													
A5.2.2.8. Wash/coat clean													
A5.2.2.9. Engine accessories													
A5.2.2.9.1. Remove and install engine system components													
A5.2.2.9.1.1. Fuel pump filter													
A5.2.2.9.1.2. Engine/nacelle anti-ice valve													
A5.2.2.9.1.3. Thermostatic/air regulator													
A5.2.2.9.1.4. Engine cowl A/I venturi duct													

1. Tasks, Knowledge And Technical References	2.		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A5.2.2.9.1.5. Excitor to ignitor plug cable													
A5.2.2.9.1.6. Ignitor plug/spark ignitor													
A5.2.2.9.1.7. Main engine control assembly													
A5.2.2.9.1.8. Thrust reverser/actuator/drive door													
A5.2.2.9.1.9. Thrust reverser/stang door													
A5.2.2.9.1.10. Blocker door													
A5.2.2.9.1.11. Translating cowl													
A5..2.9.1.12. Ballscrew actuators/flex shaft/sinc cables													
A5.2.2.9.1.13. TR filter													
A5.2.2.9.1.14. TR pump													
A5.2.2.9.1.15. TR control valve													
A5.2.2.9.1.16. Engine throttle assembly													
A5.2.2.9.1.17. Engine oil quantity switch													
A5.2.2.9.1.18. Engine oil filter													
A5.2.2.9.1.19. Engine oil pressure relief valve													
A5.2.2.9.1.20. Oil pressure differential switches													
A5.2.2.9.1.21. Fuel pressurizing and dump/control valve													
A5.2.2.9.1.22. Fuel shutoff actuator													
A5.2.2.9.1.23. Fuel flow transmitter													
A5.2.2.9.1.24. Fuel/oil cooler/heat exchanger													
A5.2.2.9.1.25. Main air/oil cooler													



1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A5.2.2.9.1.26. Pneumatic ducting													
A5.2.2.9.1.27. Starter control valve													
A5.2.2.9.1.28. Engine starter													
A5.2.2.9.1.29. Forward/Aft/upper/lower cowl door													
A5.2.2.9.1.30. Generator													
A5.2.2.9.1.31. Front accessory cover													
A5.2.2.9.1.32. EGT/TIT harness													
A5.2.2.9.1.33. Nose dome/spinner cone/CAP													
A5.2.2.9.1.34. Nose/inlet cowl													
A5.2.2.9.1.35. Engine mounts													
A5.2.2.9.1.36. N1 Tach generator/sensor													
A5.2.2.9.1.37. N2 Tach generator/control alternator													
A5.2.2.9.1.38. Engine oil tank													
A5.2.2.9.1.39. Oil pressure transmitter													
A5.2.2.9.1.40. Hydraulic filter													
A5.2.2.9.1.41. Hydraulic pump													
A5.2.2.9.1.42. Engine fuel differential pressure switch													
A5.2.2.9.1.43. Engine oil temperature sensor													
A5.2.2.9.1.44. Engine fuel filter (e.g. control, pump, P&D, etc)													
A5.2.2.9.1.45. Engine exhaust cone (e.g. Plug/nozzle)													
A5.2.2.9.1.46. Pneumatic fuel heater assembly													

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A5.2.2.9.1.47. Engine low fuel pressure switch													
A5.2.2.9.1.48. Pneumatic fuel heater shutoff valve/actuator													
A5.2.2.9.1.49. Engine low oil pressure switch													
A5.2.2.9.1.50. Engine air/oil separator													
A5.2.2.9.1.51. Sound suppression panels													
A5.2.2.9.1.52. CSD/IDG													
A5.2.2.9.1.53. CSD/IDG filters													
A5.2.2.9.1.54. Engine electrical harness													
A5.2.2.9.1.55. EEC/PMC													
A5.2.2.9.1.56. Compressor stator cylinder													
A5.2.2.9.1.57. 14th stage bleed converter valve													
A5.2.2.9.1.58. Starting (14th stage) Bleed valve													
A5.2.2.9.1.59. Bleed valve cylinder													
A5.2.2.9.1.60. Turbine cooling air valves													
A5.2.2.9.1.61. ACC cooling air valves													
A5.2.2.9.1.62. Air/oil cooling air shutoff valve													
A5.2.2.9.1.63. Lubrication/scavenge oil pump													
A5.2.2.9.1.64. Fuel/oil heat exchanger solenoid													
A5.2.2.9.1.65. #4 bearing scavenge valve													

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A5.2.2.9.1.66. V-groove (V-Band) latch assembly													
A5.2.2.9.1.67. Load sharing latches													
A5.2.2.9.1.68. 95% deployed proximity sensors													
A5.2.2.9.1.69. Fuel injector and support assembly													
A5.2.2.9.1.70. Burner immersion thermocouple (T3.5)													
A5.2.2.9.1.71. Gearbox scavenge oil pump													
A5.2.2.9.2. Inspect engine system components													
A5.2.2.9.2.1. Fuel pump filter													
A5.2.2.9.2.2. Engine/nacelle anti-ice valve													
A5.2.2.9.2.3. Thermostatic/air regulator													
A5.2.2.9.2.4. Engine cowl A/I venturi duct													
A5.2.2.9.2.5. Ignitor plug/spark ignitor													
A5.2.2.9.2.6. Main engine control assembly													
A5.2.2.9.2.7. Thrust reverser actuator/drive motor													
A5.2.2.9.2.8. Thrust reverser stang door													
A5.2.2.9.2.9. Blocker door													
A5.2.2.9.2.10. Translating cowl													
A5.2.2.9.2.11. Ballscrew actuators/flex shaft/sinc cables													
A5.2.2.9.2.12. TR filter													
A5.2.2.9.2.13. TR pump													

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A5.2.2.9.2.14. TR control valve													
A5.2.2.9.2.15. Engine throttle assembly													
A5.2.2.9.2.16. Engine oil quantity switch													
A5.2.2.9.2.17. Engine oil filter													
A5.2.2.9.2.18. Engine oil pressure relief valve													
A5.2.2.9.2.19. Oil pressure differential switches													
A5.2.2.9.2.20. Fuel pressurizing and dump/control valve													
A5.2.2.9.2.21. Fuel shutoff actuator													
A5.2.2.9.2.22. Fuel flow transmitter													
A5.2.2.9.2.23. Fuel/oil cooler/heat exchanger													
A5.2.2.9.2.24. Main air/oil cooler													
A5.2.2.9.2.25. Pneumatic ducting													
A5.2.2.9.2.26. Starter control valve													
A5.2.2.9.2.27. Engine starter													
A5.2.2.9.2.28. Cowl doors (e.g. Forward, AFT, fan cowls, ducts)													
A5.2.2.9.2.29. Generator													
A5.2.2.9.2.30. Front accessory cover													
A5.2.2.9.2.31. EGT/TIT harness													
A5.2.2.9.2.32. Nose dome/spinner cone/CAP													
A5.2.2.9.2.33. Nose/inlet cowl													
A5.2.2.9.2.34. Engine mounts													
A5.2.2.9.2.35. N1 Tach generator/sensor													

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A5.2.2.9.2.36. N2 Tach generator/control alternator													
A5.2.2.9.2.37. Engine oil tank													
A5.2.2.9.2.38. Oil pressure transmitter													
A5.2.2.9.2.39. Hydraulic filter													
A5.2.2.9.2.40. Hydraulic pump													
A5.2.2.9.2.41. Engine fuel differential pressure switch													
A5.2.2.9.2.42. Engine oil temperature sensor													
A5.2.2.9.2.43. Engine fuel filter													
A5.2.2.9.2.44. Engine exhaust cone (e.g. Plug/nozzle)													
A5.2.2.9.2.45. Pneumatic fuel heater assembly													
A5.2.2.9.2.46. Engine low fuel pressure switch													
A5.2.2.9.2.47. Pneumatic fuel heater shutoff valve/actuator													
A5.2.2.9.2.48. Engine low oil pressure switch													
A5.2.2.9.2.49. Engine air/oil separator													
A5.2.2.9.2.50. Sound suppression panels													
A5.2.2.9.2.51. CSD/IDG													
A5.2.2.9.2.52. CSD/IDG filters													
A5.2.2.9.2.53. Engine electrical harness													
A5.2.2.9.2.54. EEC/PMC													
A5.2.2.9.2.55. Bleed valve actuator and linkage													

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A5.2.2.10. Repair engine accessories (e.g. Throttle rods, oil pressure relief valve)													
A5.2.2.11. Electronic Mechanical													
A5.2.2.11.1. R&R Electronic engine control (EEC)													
A5.2.2.11.2. R&R EEC programming plug connector assembly													
A5.2.2.11.3. R&R EEC alternator stator													
A5.2.2.11.4. R&R EEC alternator rotor													
A5.2.2.11.5. R&R EEC N1 speed motional pickup transducer													
A5.2.2.11.6. R&R EEC inlet total pressure/temperature probe (TT2/PT2)													
A5.2.2.11.7. R&R EEC oil cooler fuel temperature probe													
A5.2.2.11.8. R&R EEC oil cooler oil temperature probe													
A5.2.2.11.9. R&R EEC front wiring harness, rear wiring harness, exhaust gas temperature wiring harness (W3), core wiring harness (W3)													
A5.3. ENGINE RIGGING TR: Applicable aircraft/engine TOs (A2.18.)													
A5.3.1. Rig thrust reverser/micro switches													
A5.3.2. Rig engine/aircraft throttle rod assemblies													
A5.3.3. Rig engine variable stator vane (VSV) feedback cable													
A5.3.4. Rig variable stator vane/bypass valve actuators/bleed valves													
A5.3.5. Rig MEC cable													

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
<b>A5.4. AIRCRAFT INSTALLED ENGINE TESTING</b> TR: Applicable aircraft/engine TOs ( <b>A2.20.</b> )													
A5.4.1. Engine operation													
A5.4.1.1. Perform engine run (including pre-ISO performance)													
A5.4.1.2. Engine trim position "A" (Trim box)													
A5.4.1.3. Engine trim position "B" (Left seat)/trim supervisor													
A5.4.1.4. Perform ground observer/position "C" duties during engine run													
A5.4.1.5. Engine trim position "D" (Trim evaluator)/performance evaluation													
A5.4.2. Deactivate/Activate Thrust Reversers													
A5.4.3. Fan trim balance													
A5.4.4. Perform distribution system operational check (audible)													
A5.4.5. Adjust engine oil pressure													
A5.4.6. Install, operate and remove trim equipment													
<b>A5.5. SMALL GAS TURBINE (SGT) ENGINES, AUXILIARY POWER UNITS (APU), QUICK START AUXILIARY POWER SYSTEM (QSAS) OPERATING PRINCIPLES</b> TR: Applicable engine TOs ( <b>A2.22.</b> )													
A5.5.1. Service/adjust													
A5.5.1.1. Oil system													
A5.5.1.2. Fuel system													
A5.5.1.3. Electrical system													

1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A5.5.1.4. Pneumatic system													
A5.5.1.5. Enclosure													
A5.5.1.6. Inlet door and actuation system													
A5.5.2. Perform APU/QSAS checks (including pre-ISO)													
A5.5.3. Remove/install													
A5.5.3.1. APU/QSAS													
A5.5.3.2. Generator													
A5.5.3.3. Fuel control													
A5.5.3.4. Fuel filter element													
A5.5.3.5. Fuel nozzle assembly													
A5.5.3.6. Start/servo fuel solenoid valve													
A5.5.3.7. Oil temperature/pressure switch													
A5.5.3.8. Oil filter element													
A5.5.3.9. Pneumatic ducting													
A5.5.3.10. Pneumatic control valve(s)													
A5.5.3.11. EGT thermocouple													
A5.5.3.12. Fire detector loop (upper/lower)													
A5.5.3.13. Ignition cable/leads/plugs													
A5.5.3.14. Ignition exciter													
A5.5.3.15. Air inlet doors													
A5.5.3.16. Inlet door actuator													
A5.5.3.17. Electrical harness and cannon plugs													



1. Tasks, Knowledge And Technical References	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Notes)					
			A	B	C	D	E	A 3 Skill Level	B CDC		C 7 Skill Level	EXPORTABLE COURSE	
	5	7	Tng Start	Tng Comp	Trainee Initials	Trainer Initials	Certifier Initials	Course	5	7	Course	5 LVL	7 LVL
A5.5.3.18. Starter/clutch/paw carrier													
A5.5.3.19. Oil pump													
A5.5.3.20. Fuel flow divider valve assembly													
A5.5.3.21. Combustion case drain valve													
A5.5.3.22. Electronic control unit/voltage regulator/four speed box													
A5.5.3.23. Cooling fan assembly													
A5.5.3.24. Inlet pressure (P2) sensor													
A5.5.3.25. Inlet temperature (T2) sensor													
A5.5.3.26. Motional transducer assembly													
A5.5.3.27. Oil temperature regulator (oil cooler)													
A5.5.3.28. Generator filter pressure regulator valve													
A5.5.3.29. Electronic control unit operation													
A5.5.4. Power plant operation													
A5.5.4.1. On aircraft													
A5.5.4.2. Test cell													

## ***Section B - Course Objective List***

**4. Measurement.** Each proficiency coded STS task or knowledge item taught at the technical school is measured through the use of an objective. An objective is a written instruction for the student so he or she knows what is expected of them to successfully complete training on each task. Each objective is comprised of a condition, behavior, and standard which states what is expected of the student for each task. The condition is the setting in which the training takes place (i.e. TOs, type of equipment, etc). The behavior is the observable portion of the objective (i.e. remove fuel control). The standard is the level of performance that is measured to ensure the STS proficiency code level is attained. Each objective uses letter code(s) to identify how it's measured. All objectives use the **PC** code which indicates a progress check is used to measure subject or task knowledge. **W** indicates a comprehensive written test and is used to measure the subject or task knowledge at the end of a block of instruction. **PC/W** indicates a subject or task knowledge progress check *and* a separate measurement of both knowledge and performance elements using a written test.

**5. Standard.** The standard is 70% on written examinations. Standards for performance objectives are indicated in the objective and are also indicated on the individual progress check checklist. The checklist is used by the instructor to document each students progress on each task. Instructor assistance is provided as needed during the progress check, and students may be required to repeat all or part of the behavior until satisfactory performance is attained. Students must satisfactorily complete all PCs prior to taking the written test.

**6. Proficiency Level.** Review column 4A of the STS to determine the proficiency level of a particular task or knowledge item. Review the course objective list to determine which STS item the objective supports. Review the proficiency code key in Part II, Section A of this CFETP for an explanation of the proficiency codes. Most task performance is taught to the “2b” proficiency level which means the students can do most parts of the task, but does need assistance on the hardest parts of the task (partially proficient). The student can also determine step by step procedures for doing the task. For tasks that are taught to the “3c” proficiency level, students can do all parts of the task and only require a spot check on completed work (competent). The student can also identify why and when a task must be done and why each step is needed.

**7. Course Objective.** A detailed listing of initial skills or craftsman course objectives may be obtained by submitting a written request to Mr. Joseph Manzo, 361 TRS/RJ, 501 Missile Road, Sheppard AFB, TX 76311-2264.

### ***Section C - Support Material***

**8.** The following list of support materials is not all inclusive; however, it covers the most frequently referenced areas. For further information on the following courses, contact the OPR at:

362 TRS  
613 10th Ave.  
Sheppard AFB, TX 76311-2352  
DSN 736-5206

<b><u>COURSE NUMBER</u></b>	<b><u>TITLE</u></b>	<b><u>OPR</u></b>
J6AZU2E066 038	Air Force Technical Order (T.O.) System (General)	362 TRS
J6AZU2E066 039	Air Force T.O. System (Advanced)	362 TRS
J6AZU2E066 058	Air Force Maintenance Data Collection System (CAMS)	362 TRS
J6AZU2E066 059	Air Force Maintenance Data Collection System (CAMS)	362 TRS
J6AZU2E066 061	Air Force Maintenance Data Collection System (CAMS) Operators Course (Introduction)	362 TRS
J6AZU2E066 062	Air Force Maintenance Data Collection System (CAMS) Mid Level Maintenance Managers	362 TRS

### ***Section D - Training Course Index***

**9. Purpose.** This section of the CFETP identifies training courses available for the Aerospace Propulsion Specialty and shows how the courses are used by each MAJCOM in their career field training programs. For further information on the following courses, contact the OPR at:

361 TRS  
501 Missile Rd.  
Sheppard AFB, TX 76311-2264  
DSN 736-2515

### **10. Air Force In-Residence Courses.**

<b><u>COURSE NUMBER</u></b>	<b><u>TITLE</u></b>	<b><u>LOCATION</u></b>	<b><u>USER</u></b>
J3AQR2A611 001 Fundamentals	Aerospace Propulsion	Sheppard AFB	AF
J3ABR2A631C 001	Aerospace Propulsion Conventional	Sheppard AFB	AF
J3ABR2A631D 007	Aerospace Propulsion F100	Sheppard AFB	AF
J3ABR2A631E 006	Aerospace Propulsion F110	Sheppard AFB	AF
J3AZR2A651A 006	Aerospace Propulsion F110 5-level	Sheppard AFB	AF
J3ACR2A671A 003	Aerospace Propulsion Jet Engine Craftsman	Sheppard AFB	AF

#### **11. Extension Course Institute (ECI) Courses.**

<b><u>COURSE NUMBER</u></b>	<b><u>TITLE</u></b>	<b><u>LOCATION</u></b>	<b><u>USER</u></b>
CDC 2A651A	Aerospace Propulsion Jet Engine Journeyman	Sheppard AFB	AF
CDC 2A671A	Aerospace Propulsion Jet Engine Craftsman	Sheppard AFB	AF

#### **12. Exportable Courses.**

For further information on the following exportable courses, contact the OPRs at:

361 TRS 501 Missile Rd. Sheppard AFB, TX 76311-2264 DSN 736-2515	AETC/TRSS 6058 Aspen Ave. Hill AFB, UT 84056-5805 DSN 775-3194
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<b><u>COURSE NUMBER</u></b>	<b><u>TITLE</u></b>	<b><u>OPR</u></b>
J6ANU2A6X1A 024	TF33-P-3/5 Engine Trim (CBT)	361 TRS
J6AGL2A6X1A 027	KC-135R Quick Start Auxiliary System (QSAS) (VTT)	361 TRS

J6AGL2A6X1A 041	GTC85-106A Small Gas Turbine Engine (VTT & CBT)	361 TRS
J6AGL2A6X1A 042	TF33 Jet Engine Technician (VTT & CBT)	361 TRS
01JIV8931V5.1.1	B-1B APU Operation (CBT)	AETC/TRSS
01CPB4620R2	B-1B Engine Oil Analysis	AETC/TRSS
52CVT0413	B-52H Engine Inlet (VHS)	AETC/TRSS
15TIV23K1	F100 Ignition System Troubleshooting	AETC/TRSS
15AIV2400	F-15 Secondary Power System Troubleshooting and Maintenance	AETC/TRSS
15AIV2401	F-15 Secondary Power System Advanced Troubleshooting	AETC/TRSS
16AIV24D0	F-16C/D Engine Start System	AETC/TRSS
16AIV27G0	F-16C/D F110-GE-100 Engine Fuel and Control Advanced Troubleshooting	AETC/TRSS
16GIV2304	F-16C/D F100-PW-220 Engine Fuel and Control Troubleshooting	AETC/TRSS
16TIV24D0	F-16C/D Block 50 Engine Start System Troubleshooting	AETC/TRSS
00CVT0009	Torque Wrench Use and Care (VHS)	AETC/TRSS
00CIV0008	Type III Torque Wrench Use and Care (CBT)	AETC/TRSS
00TIV0001V1	Troubleshooting Techniques	AETC/TRSS
00TCB0002V1	Multimeter Familiarization	AETC/TRSS

### 13. Field Training Detachment (FTD) Courses.

For further information on the following FTD courses, contact the OPRs at:

372 TRS (Fighter)  
912 I Ave STE 3  
Sheppard AFB, TX 76311-2361  
DSN 736-4801

373 TRS (Bomber/Cargo/Tanker)  
912 I Ave STE 4  
Sheppard AFB, TX 76311-2362  
DSN 736-4679

<b><u>COURSE NUMBER</u></b>	<b><u>TITLE</u></b>	<b><u>OPR</u></b>
J4AMF/ASF/AST2A6X1A 000	F-15 Engine Start System (I/M)	372 TRS
J4AMF/ASF/AST2A6X1A 001	F100-PW-220/220E (I/M)	372 TRS
J4AMF/ASF/AST2A6X1A 002	F100-PW-220	372 TRS
J4AMF/ASF/AST2A6X1A 007	TR-1/U-2R, J75-13B Systems and Troubleshooting	373 TRS
J4AMF/ASF/AST2A6X1A 010	U-2R Engine Operator	373 TRS
J4AMF/ASF/AST2A6X1A 015	KC-10, CF6-50 Systems	373 TRS
J4AMF/ASF/AST2A6X1A 016	KC-10, APU (O/M)	373 TRS
J4AMF/ASF/AST2A6X1A 017	F101 (O/M)	373 TRS
J4AMF/ASF/AST2A6X1A 018	F101 (I/M)	373 TRS
J4AMF/ASF/AST2A6X1A 019	F101 Engine Run Supervisor	373 TRS
J4AMF/ASF/AST2A6X1A 023	B-52 Engine Operator	373 TRS
J4AMF/ASF/AST2A6X1A 025	EC/KC/RC/WC-135, J57 or TF33 Engine Operation	373 TRS
J4AMF/ASF/AST2A6X1A 026	TF33-P-5/9/102 Familiarization	373 TRS
J4AMF/ASF/AST2A6X1A 028	KC-135R/T, F108 Engine Operator	373 TRS
J4AMF/ASF/AST2A6X1A 034	KC-135 Quick Start Auxiliary Power Unit System	373 TRS
J4AMF/ASF/AST2A6X1A 035	F108-CF-100 (O/M)	373 TRS
J4AMF/ASF/AST2A6X1A 036	KC-135, T41M APU	373 TRS

J4AMF/ASF/AST2A6X1A 037	E-3, TF33-P-100A (O/M)	373 TRS
J4AMF/ASF/AST2A6X1A 038	GTCP165-1/1A (O/M)	373 TRS
J4AMF/ASF/AST2A6X1A 048	TF39 (I/M)	373 TRS
J4AMF/ASF/AST2A6X1A 049	C-5, GTCP165-1 (I/M)	373 TRS
J4AMF/ASF/AST2A6X1A 050	C-5, GTCP165-1 (O/M)	373 TRS
J4AMF/ASF/AST2A6X1A 056	A-10, TF34 (I/M)	373 TRS
J4AMF/ASF/AST2A6X1A 064	F110-GE-100 (I/M)	372 TRS
J4AMF/ASF/AST2A6X1A 065	F100-PW-100 (I/M)	372 TRS
J4AMF/ASF/AST2A6X1A 068	F110-GE-129 (I/M)	372 TRS
J4AMF/ASF/AST2A6X1A 070	F100-PW-229 (I/M)	372 TRS
J4AMF/ASF/AST2A6X1A 071	F100-PW-229 (I/M)	372 TRS
J4AMF/ASF/AST2A6X1A 072	TF33 Depot Maintenance	373 TRS
J4AMF/ASF/AST2A6X1A 073	C-141, TF33 (I/M)	373 TRS
J4AMF/ASF/AST2A6X1A 074	APU/Engine (O/M)	373 TRS
J4AMF/ASF/AST2A6X1A 080	F118 Maint (APU, AMAD, Borescope, Systems, and Component Maintenance)	373 TRS
J4AMF/ASF/AST2A6X1A 081	B-2 (F118) Engine Operator	373 TRS
J4AMF/ASF/AST2A6X1A 082	TF33-P-3 (O/M)	373 TRS
J4AMF/ASF/AST2A6X1A 086	F110-GE-129 Intermediate Differences	372 TRS
J4AMF/ASF/AST2A6X1A 089	F-117 Structural Tracking and Engine Monitoring System	373 TRS
J4AMF/ASF/AST2A6X1A 090	F404 Engine (I/M)	372 TRS
J4AMF/ASF/AST2A6X1A 091	F404 Borescope and Blade Blending Maintenance	372 TRS
J4AMF/ASF/AST2A6X1A 092	KC-135R, F108 Engine Trending and Diagnostic	373 TRS

J4AMF/ASF/AST2A6X1A 093	EC/C-18, TF33-P102 Maintenance	373 TRS
J4AMF/ASF/AST2A6X1A 094	KC-135R Quick Start Auxiliary Power Unit System Familiarization	373 TRS
J4AMF/ASF/AST2A6X1A 095	U-2S, F118-GE-101 Engine Familiarization	373 TRS
J4AMF/ASF/AST2A6X1A 096	U-2S, F118-GE-101 Engine Borescope	373 TRS
J4AMF/ASF/AST2A6X1A 097	U-2S, F118-GE-101 Engine Troubleshooting	373 TRS
J4AMF/ASF/AST2A6X1A 098	U-2S Engine Operator	373 TRS
J4AMF/ASF/AST2A6X1A 099	Advanced Engine (O/M)	373 TRS
J4AMF/ASF/AST2A6X1A 100	Advanced APU	373 TRS
J4AMF/ASF/AST2A6X1A 101	F-16, F110 Engine Removal/Replacement	372 TRS
J4AMF/ASF/AST2A6X1A 102	F-16, F110-GE-129 Engine (O/M)	372 TRS
J4AMF/ASF/AST2A6X1A 103	F-16, F100-PW-220/220E Engine (O/M)	372 TRS
J4AMF/ASF/AST2A6X1A 104	F-16, F100-PW-229 Engine (O/M)	372 TRS
J4AMF/ASF/AST2A6X1A 105	F-16, F100-PW-229 Engine O/M Differences	372 TRS
J4AMF/ASF/AST2A6X1A 106	F-16, F110-GE-100 Engine (O/M)	372 TRS
J4AMF/ASF/AST2A6X1A 107	F-16, F100 Engine Removal/Replacement	372 TRS

**14. Courses Under Development/Revision.** There is currently no courses under development/revision.

***Section E - MAJCOM Unique Requirements***



**15.** The following list of MAJCOM unique responses is not all inclusive; however, it covers the most frequently referenced areas.

***NOTE:*** There are currently no MAJCOM unique requirements. This area is reserved.